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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.				
10/781,480	02/18/2004	Kazumi Aoyama	450100-04935	3114				
7590 11/16/2007								
William S. Frommer, Esq. FROMMER LAWRENCE & HAUG LLP 745 Fifth Avenue New York, NY 10151		<table border="1"><tr><td>EXAMINER</td></tr><tr><td>WEISKOPF, MARIE</td></tr></table>			EXAMINER	WEISKOPF, MARIE		
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		<table border="1"><tr><td>MAIL DATE</td><td>DELIVERY MODE</td></tr><tr><td>11/16/2007</td><td>PAPER</td></tr></table>			MAIL DATE	DELIVERY MODE	11/16/2007	PAPER
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11/16/2007	PAPER							

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/781,480

Applicant(s)

AOYAMA ET AL.

Examiner

Marie A. Weiskopf

Art Unit

3664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

The amendment to the claims filed on 8/28/07 does not comply with the requirements of 37 CFR 1.121(c) because Claims 1 and 5 should state (currently amended) and not (original). Amendments to the claims filed on or after July 30, 2003 must comply with 37 CFR 1.121(c) which states:

(c) *Claims*. Amendments to a claim must be made by rewriting the entire claim with all changes (e.g., additions and deletions) as indicated in this subsection, except when the claim is being canceled. Each amendment document that includes a change to an existing claim, cancellation of an existing claim or addition of a new claim, must include a complete listing of all claims ever presented, including the text of all pending and withdrawn claims, in the application. The claim listing, including the text of the claims, in the amendment document will serve to replace all prior versions of the claims, in the application. In the claim listing, the status of every claim must be indicated after its claim number by using one of the following identifiers in a parenthetical expression: (Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New), and (Not entered).

Please correct on next correspondence.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 5, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Galuga et al. (6,035,243).

As per claims 1 and 5, Galuga discloses a robot apparatus (col. 4, line 47) comprising: sensor means for detecting an external (col. 11, lines 47-49) or internal (col. 11, lines 49-52) situation. Galuga further discloses a determination means for determining based on said external or internal situation and a serious level of the external or internal situation (col. 12, lines 34-36) whether to ask for help (col. 12, lines 65-67), the serious level indicating how serious the external or internal situation is for the robot itself (col. 12, lines 60-64). Galuga further discloses an asking action selection means for selecting an action asking for help based on said external or internal situation and said serious level (col. 13, lines 16-22) and making said robot apparatus take the action when said determination means decides to ask for help (col. 13, lines 22-24).

As per claims 3 and 7, Galuga discloses a case where said external or internal situation is a critical situation with a high serious level (col. 13, lines 36-38), said asking action selection means changes a robot mode so as to delay progress of the critical situation when the external or internal situation is not improved after asking for help (col. 13, lines 38-39).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3664

4. Claims 2, 4, 6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Galuga et al. (6,035,243) in view of Swinson et al. (Jul/Aug 2000).

As per claims 2 and 6, although Galuga discloses all the claimed elements as mentioned in claims 1 and 5, Galuga fails to disclose selecting another action asking for help when said external or internal situation is not improved after an initial ask for help.

Swinson in the same field of invention inherently discloses asking for help when said external or internal situation is not improved after an initial ask for help by stating that a robot will continue asking for help until the robot can autonomously complete the task (2<sup>nd</sup> paragraph of page 16).

From this teaching of Swinson, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the robot apparatus of Galuga to include selecting another action asking for help when said external or internal situation is not improved after an initial ask for help as taught by Swinson, in order to adapt to the unanticipated circumstances in an unstructured environment (paragraph 2, page 12).

As per claims 4 and 8, Galuga discloses all the claimed elements as mentioned in claims 1 and 5, and a storage means (32). Galuga fails to disclose storing a log of past actions asking for help and their results.

Swinson in the same field of invention discloses storing a log of past actions asking for help and their results (paragraph 6 of page 15).

From this teaching of Swinson, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the robot apparatus

of Galuga to include selecting another action asking for help when said external or internal situation is not improved after an initial ask for help as taught by Swinson, in order for robots to learn from natural, multimodal interactions with the environment (paragraph 2 of page 12).

### ***Response to Arguments***

1. Applicant's arguments filed 8/28/07 have been fully considered but they are not persuasive. Applicant argues that Galunga fails to teach or suggest determination means for determining as a function of the external or internal situation and a corresponding serious level of the external or internal situation whether to ask for help, wherein the serious level indicates how serious the external or internal situation is for the robot itself. Examiner respectfully disagrees. Galunga specifically discloses determining the type of error (Column 12, lines 55-59) and then determines what to do with that error. (Column 12, line 59 - Column 13, line 60). Galunga determines if the error is correctable or fatal, which would be determining the serious level of the situation and also decides whether to ask for help.

### ***Conclusion***

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the


shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marie A. Weiskopf whose telephone number is (571) 272-6288. The examiner can normally be reached on Monday-Thursday between 7:00 AM and 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MW



THOMAS BLACK  
SUPERVISORY PATENT EXAMINER